

WHAT IS CLAIMED IS:

- 1 1. A method comprising:

2 determining if a device emits electromagnetic interference (EMI) in one or
3 more regions of an electromagnetic spectrum occupied by other
4 users; and

5 if it is determined that the device emits EMI in one or more regions of the
6 electromagnetic spectrum occupied by other users:

7 reducing the EMI in the one or more regions; and

8 increasing the EMI in one or more other regions of the
9 electromagnetic spectrum that are unoccupied by the other
10 users.
- 1 2. The method of claim 1, wherein said reducing the EMI in the one or more
2 regions comprises removing the EMI from the one or more regions.
- 1 3. The method of claim 1, wherein said method comprises determining if the
2 device unintentionally emits EMI in one or more regions of an
3 electromagnetic spectrum occupied by other users, and comprises
4 reducing the EMI in the one or more regions, and increasing the EMI in
5 one or more other regions if it is determined that the device unintentionally

6 emits EMI in one or more regions of an electromagnetic spectrum
7 occupied by other users.

1 4. The method of claim 3, wherein the device unintentionally emits EMI in
2 one or more regions of a radio frequency spectrum occupied by licensed
3 users, and said increasing the EMI results in increasing the EMI in one or
4 more other regions of the radio frequency spectrum that are unoccupied
5 by the licensed users.

1 5. The method of claim 1, wherein said determining if the device emits EMI in
2 one or more regions of the electromagnetic spectrum occupied by other
3 users comprises:
4 determining a presence of other users at the device's location; and
5 determining the one or more regions of the electromagnetic spectrum
6 occupied by the other users at the location.

1 6. The method of claim 5, wherein said determining the presence of other
2 users at the device's location comprises:
3 determining a location of the device; and
4 accessing a database of users at the location.

1 7. The method of claim 5, wherein said determining the presence of other
2 users at the device's location comprises listening for the presence of other
3 users.

1 8. The method of claim 5, wherein said determining the presence of other
2 users at the location comprises determining the presence of other users
3 licensed at the location.

1 9. A method comprising: ~
2 determining if a device emits electromagnetic interference (EMI) in the
3 presence of other users in an electromagnetic spectrum; and
4 if it is determined that the device emits EMI in the presence of other users
5 in the electromagnetic spectrum;
6 determining if the device's current location is the same as the
7 device's previous location; and
8 if the current location is the same as the previous location:
9 reducing the EMI in one or more regions of the
10 electromagnetic spectrum occupied by the other
11 users; and

12 increasing the EMI in one or more other regions of the
13 electromagnetic spectrum unoccupied by the other
14 users.

1 10. The method of claim 9, additionally comprising if the current location is not
2 the same as the previous location:

3 determining one or more regions of the electromagnetic occupied by the
4 other users;

5 reducing the EMI in the one or more regions; and

6 increasing the EMI in one or more other regions of the electromagnetic
7 spectrum unoccupied by the other users.

1 11. The method of claim 9, wherein said method comprises determining if the
2 device unintentionally emits EMI in the electromagnetic spectrum.

1 12. The method of claim 11, wherein the device unintentionally emits EMI in
2 the presence of licensed users in a radio frequency spectrum, and said
3 increasing the EMI results in increasing the EMI in one or more other
4 regions of the radio frequency spectrum that are unoccupied by the
5 licensed users.

1 13. A method comprising: 7
2 determining if a device emits electromagnetic interference (EMI) in
3 unacceptable levels in one or more regions of an electromagnetic

4 spectrum; and
5 if it is determined that a device emits electromagnetic interference (EMI) in
6 unacceptable levels in one or more regions of an electromagnetic
7 spectrum:
8 reducing the EMI in the one or more regions; and
9 increasing the EMI in one or more other regions of the
10 electromagnetic spectrum unoccupied by the other users.

1 14. The method of claim 13, wherein the device is a non-communications
2 device.

1 15. The method of claim 13, wherein the electromagnetic spectrum comprises
2 a radio frequency spectrum.

1 16. An apparatus comprising:
2 circuitry capable of determining if a device emits electromagnetic
3 interference (EMI) in one or more regions of an electromagnetic
4 spectrum occupied by other users; and
5 if it is determined that the device emits EMI in the one or more regions of
6 an electromagnetic spectrum occupied by other users, the circuitry
7 additionally capable of:
8 reducing the EMI in the one or more regions; and
9 increasing the EMI in one or more other regions of the

10 electromagnetic spectrum unoccupied by the other users.

1 17. The apparatus of claim 16, wherein said circuitry is additionally capable of
2 removing the EMI from the one or more regions.

1 18. The apparatus of claim 16, wherein said circuitry is additionally capable of
2 determining if the device unintentionally emits EMI in one or more regions
3 of an electromagnetic spectrum occupied by other users, and of reducing
4 the EMI in the one or more regions, and increasing the EMI in one or more
5 other regions if the circuitry determines that the device unintentionally
6 emits EMI in one or more regions of an electromagnetic spectrum
7 occupied by other users.

1 19. The apparatus of claim 18, wherein the device unintentionally emits EMI in
2 one or more regions of a radio frequency spectrum occupied by licensed
3 users, and said circuitry is additionally capable of increasing the EMI in
4 one or more other regions of the radio frequency spectrum unoccupied by
5 the licensed users.

1 20. The apparatus of claim 16, wherein said circuitry is additionally capable of:
2 determining a presence of other users at the device's location; and
3 determining the one or more regions of the electromagnetic spectrum
4 occupied by the other users at the location.

1 21. The apparatus of claim 20, wherein said circuitry is additionally capable of:

2 determining a location of the device; and
3 accessing a database of users at the location.

1 22. A system comprising:

2 a communications device to emit EMI; and

3 circuitry capable of:

4 determining if the communications device emits electromagnetic

5 interference (EMI) in one or more regions of an

6 electromagnetic spectrum occupied by other users; and

7 if it is determined that the communications device emits EMI in the

8 one or more regions of an electromagnetic spectrum

9 occupied by other users:

10 reducing the EMI in the one or more regions; and

11 increasing the EMI in one or more other regions of the

12 electromagnetic spectrum unoccupied by the other

13 users.

1 23. The system of claim 22, wherein said circuitry is additionally capable of
2 removing the EMI from the one or more regions.

1 24. The system of claim 22, wherein said circuitry is additionally capable of
2 determining if the communications device unintentionally emits EMI in one
3 or more regions of an electromagnetic spectrum occupied by other users,

4 and of reducing the EMI in the one or more regions, and increasing the
5 EMI in one or more other regions if the circuitry determines that the
6 communications device unintentionally emits EMI in one or more regions
7 of an electromagnetic spectrum occupied by other users.

1 25. The system of claim 24, wherein the communications device
2 unintentionally emits EMI in one or more regions of a radio frequency
3 spectrum occupied by licensed users, and said circuitry is additionally
4 capable of increasing the EMI in one or more other regions of the radio
5 frequency spectrum that are unoccupied by the licensed users.

1 26. The system of claim 22, wherein said circuitry is additionally capable of:
2 determining a presence of other users at the device's location; and
3 determining the one or more regions of the electromagnetic spectrum
4 occupied by the other users at the location

1 27. A machine-readable medium having stored thereon instructions, the (c)
2 instructions when executed by a machine, result in the following:
3 determining if a device emits electromagnetic interference (EMI) in one or
4 more regions of an electromagnetic spectrum occupied by other
5 users; and

6 if it is determined that the device emits EMI in one or more regions of the
7 electromagnetic spectrum occupied by other users:

8 reducing the EMI in the one or more regions; and

9 increasing the EMI in one or more other regions of the
10 electromagnetic spectrum that are unoccupied by the other
11 users.

1 28. The machine-readable medium of claim 27, wherein the instructions, when
2 executed by a machine, that result in reducing the EMI in the one or more
3 regions additionally result in removing the EMI from the one or more
4 regions.

1 29. The machine-readable medium of claim 27, wherein the instructions, when
2 executed by a machine, that result in determining if the device emits EMI
3 additionally result in determining if the device unintentionally emits EMI in
4 one or more regions of an electromagnetic spectrum occupied by other
5 users, and in reducing the EMI in the one or more regions, and increasing
6 the EMI in one or more other regions if it is determined that the device
7 unintentionally emits EMI in one or more regions of an electromagnetic
8 spectrum occupied by other users.

1 30. The machine-readable medium of claim 29, wherein the device
2 unintentionally emits EMI in one or more regions of a radio frequency
3 spectrum occupied by licensed users, and wherein the instructions, when
4 executed by a machine, that result in increasing the EMI additionally result
5 in increasing the EMI in one or more other regions of the radio frequency
6 spectrum that are unoccupied by the licensed users.